Named to Household International Professorship in Economics, September 1987 - August 1989

Lynde & Harry Bradley Foundation Research Grant, "An Economic Analysis of Defense Procurement Regulations," June 1989 - December 1991.

NSF Grant SES-8906751, "Profit Regulation of Defense Contractors," August 1,1989 - July 31, 1991.

Olin Fellow at The Centre for the Study of the Economy and the State, University of Chicago, October 1,1989 - June 30,1990.

Faculty Fellow, Center for Urban Affairs and Policy Research, Northwestern University, September 1991-present.

Smith Richardson Foundation, Inc. Research Grant, "Economic Incentives and the Defense Procurement Process," March 1, 1993 - May 31, 1995.

Elected a Fellow of the Econometric Society, 1999

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Incentives and Information in Markets and Organizations, Regulation, Industrial Organization, Cost Accounting, Telecommunications, Defense Procurement, and Health Care.

Employment Histo:

Research Assistant to Canadian Member of Parliament, Arnold Malone, June 1975 - September 1975

Teaching Assistant at University of Alberta, September 1975 - June 1976

Economist, Department of Industry, Trade and Commerce, Government of Alberta, June 1976 September 1976

Research Assistant, Environmental Quality Laboratory, Caltech, June 1977 - September 1977

Economist, Long Range Planning and Structural Analysis Division, Department of Finance, Government of Canada, June 1978 - September 1978

Teaching Assistant to Professor Charles R. Plott, Division of Humanities and Social Sciences, Caltech, September 1979 - June 1980

Assistant Professor of Economics, Stanford University, September 1980- August 1984

Associate Professor of Economics, Northwestern University, September 1984 - May 1990

Professor of Economics, Northwestern University, May 1990-Present

Chair, Economics Department, Northwestern University, September 1996 - August 1998.

Chief Economist, Federal Communications Commission, June 1, 1998-May 31, 1999 (on leave from Northwestern for this year.)

Director, Northwestern Program in Mathematical Methods in the Social Sciences, September 2000- present.

Co-Director, Center for the Study of Industrial Organization, Northwestern University, September 2000-present.

Professional Activities

Editor of <u>Defense and Peace Economics</u>, January 1995 - December 1998.

Member of the editorial board of <u>Defense and Peace Economics</u>, September 1991 - December 1998.

Member of the editorial board of Review of Accounting Studies, September 1993 to present.

Member of the editorial board of Journal of Industrial Economics, October 1995- Sept. 1998.

Chief Economist of Federal Communications Commission, June 1, 1998 - May 31, 1999.

Member of the Illinois Economic Policy Council, September 1999 to present.

Consultant to: Federal Communications Commission, Federal Trade Commission, Institute for

Defense Analysis, Logistics Management Institute, Office of the Secretary of Defense (Program Analysis and Evaluation), RAND Corporation, US Department of Justice

Refereed Publications

- "Aggregate Expected Consumer Surplus As a Welfare With an Application to Price Stabilization," <u>Econometrica</u>, 49, No. 2, (March 1980), pp. 423-436.
- "Agriculture in Development: A Game-Theoretic Analysis," with Robert Bates, <u>Public Choice</u>, 35, (1980), pp. 513-527.
- "The Social Costs of Monopoly and Regulation: A Game-Theoretic Analysis," <u>Bell Journal of Economics</u>, 13, No 2, (Autumn 1982), pp. 391-401.
- "Reputation and Product Quality," Bell Journal of Economics, 14, No. 2, (Fall 1983), 508-515.
- "Consumer Misperceptions, Market Power and Product Safety," with Mitchel Polinsky, <u>Bell Journal of Economics</u>, 14, No. 2, (Fall 1983), 581-589.
- "A Note on the Incentive for a Monopolist to Increase Fixed Costs as a Barrier to Entry," Quarterly Journal of Economics, 396, May 1984,399-402.

- "Efficient Reliance and Damage Measures for Breach of Contract," Rand Journal of Economics, Spring 1984, 39-53.
- "Repeated Moral Hazard," Econometrica, 53, January 1985, 69-76.
- "The First-Order Approach to Principal Agent Problems," <u>Econometrica</u>, 53, November 1985, 1357-1368.
- "Robust Trading Mechanisms" with Kathleen Hagerty, <u>Journal of Economic Theory</u>, **42**, June 1987, 94-107.
- "The Dissipation of Profits by Brand Name Capital and Entry When Price Guarantees Quality," <u>Journal of Political Economy</u>, 95, August 1987,797-809.
- "A Note on the Existence of Single Price Equilibrium Price Distributions," <u>Review of Economic Studies</u>, 54, April 1987,339-342
- "Price Advertising and the Deterioration of Product Quality," <u>Review of Economic Studies</u>, 55, April 1988,215-230
- "Profit Regulation of Defense Contractors and Prizes for Innovation," <u>Journal of Political Economy</u>, 97, December 1989,1284-1305.
- "Quality vs. Quantity In Military Procurement," <u>American Economic Review</u>, 80, March 1990, 83-92.
- "Excess Capacity in Weapons Production: An Empirical Analysis," <u>Defence Economics</u>, 2, 1991,235-250.
- "Optimal Depreciation Schedules for Regulated Utilities," <u>Journal of Regulatory Economics</u>, **4**, 1992, 5-33.
- "Contractual Solutions to the Hold-Up Problem," <u>Review of Economic Studies</u>, 59, October 1991.777-794.
- "Incentives, the Budgetary Process, and Inefficiently Low Production Rates in Defense Procurement," <u>Defence Economics</u>, 3, 1991, 1-18.
- "Overhead Allocation and Incentives for Cost Minimization in Defense Procurement," <u>The Accounting Review</u>, 67, 1992, 671-690.
- "Choice of Treatment Intensities by a Nonprofit Hospital Under Prospective Pricing," <u>Journal of Economics and Management Strategy</u>, 3(1), Spring 1994, 7-52...
- "Economic Incentives and the Defense Procurement Process," <u>Journal of Economic Perspectives</u>, 8(4), Fall 1994, 65-90.
- "Inter-Temporal Cost Allocation and Managerial Investment Incentives," <u>Journal of Political Economy</u>, 105(4), 1997,770-795.

"The Regulation of Broadband Telecommunications, The Principle of Regulating Narrowly

Defined Input Bottlenecks, and Incentives for Investment and Innovation," <u>University of Chicago Legal Forum</u>, 2000, 119-147.

Other Publications

"Electric Generation Plants" Appendix F. 1 in Implementing Tradable Emissions

Permits for Sulfur Oxides Emissions in the South Coast Air Basin, Vol. II, by Glen R. Cass, Robert W. Hahn, Roger G. Noll, ARB Contract No. A8-141-31, June 30, 1982.

"A Comment on Political Institutions and Fiscal Policy: Evidence from the U.S. Historical

Record," <u>Journal of Law Economics and Organization</u>, 6, Special Issue, Conference on "The Organization of Political Institutions", 1991,155-166.

"Inefficiently Low Production Rates in Defense Procurement: An Economic Analysis," Leitzel, Jim and Jean Tirole, eds., Incentives in Defense Procurement. Boulder: Westview Press, 1993.

Profit Regulation of Defense Contractors and Prizes for Innovation, RAND, R-3635-PA&E, 1991.

An Economic Framework for Analyzing DoD Profit Policy, RAND, R-3860-PA&E, 1991.

Overhead Allocation and Incentives for Cost Minimization in Defense Procurement, RAND, R-4013-PA&E, 1992.

"Review of 'A Theory of Incentives in Procurement and Regulation," book review, <u>Journal of Political Economy</u>, 102, 1994,397-402

On the Use of Transfer Prices in DoD: The Case of Repair and Maintenance of Depot Level Reparables by the Air Force, Logistics Management Institute Paper PA303RD2, January 1995, Logistics Management Institute, McLean, VA.

"Incentive Models of the Defense Procurement Process," in Hartley, Kieth, and Todd Sandler, eds., The Handbook of Defense Economics, North Holland, 1995,309-346...

"The Economics of University Indirect Cost Reimbursement in Federal Research Grants," (with Roger Noll) in Roger Noll, ed., <u>Challenges to the Research University</u>. Washington: Brookings Institution, 1997

"New Economic Perspectives on Telecommunications Regulation," (review of <u>Competition in</u> <u>Telecommunications</u>, by Jean-Jacques Laffont and Jean Tirole), <u>University of Chicago Law</u> Review, 67, Fall 2000,1489-1505.

Recent Papers

"Renegotiation of Fixed Price Contracts on the F-16 Program," (with Tom Frazier), mimeo.

Declaration of William P Rogerson November 5, 2001

"The Use of Simple Menus of Contracts in Cost-Based Procurement and Regulation," mimeo.

CERTIFICATE OF SERVICE

I, Scott F. Llewellyn, do hereby certify that on this 5th day of November, 2001, I have caused true and correct copies of the foregoing Reply Comments of Qwest Communications International, Inc., to be served by hand delivery, indicated by an asterisk, or first-class mail upon the following parties:

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